

F00478

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic / Side Scan Sonar / Multibeam
Project No.	S-I901-WH
Registry No.	F00478
LOCALITY	
State	U.S. Virgin Islands
General Locality	St. Thomas
Sub-locality	St. Thomas Harbor
2001	
CHIEF OF PARTY Gerd F. Glang, LCDR, NOAA	
LIBRARY & ARCHIVES	
DATE	

NOAA FORM 77-28 U.S. DEPARTMENT OF COMMERCE (11-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION <div style="text-align: center; font-weight: bold; font-size: 1.2em;">HYDROGRAPHIC TITLE SHEET</div>	REGISTRY NUMBER: <div style="text-align: center; font-weight: bold; font-size: 1.2em;">F00478</div>
INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.	
State: U.S. Virgin Islands General Locality: St. Thomas Sub-Locality: St. Thomas Harbor <div style="display: flex; justify-content: space-between;"> <div>Scale: 1:5,000</div> <div>Date of Survey: 5/25/01 and 5/29/01</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Instructions Dated: 5/18/01</div> <div>Project Number: S-I901-WH</div> </div> Vessel: NOAA Ship WHITING, S-329 Chief of Party: Lieutenant Commander Gerd F. Glang, NOAA Surveyed by: WHITING Personnel Soundings by: Odom Echotrac DF3200 MK II Echosounder <div style="text-align: center;">Reson 8101 Shallow Water Multibeam</div> Graphic record scaled by: WHITING Personnel Graphic record checked by: ... WHITING Personnel <div style="display: flex; justify-content: space-between;"> <div>Protracted by: N/A</div> <div>Automated Plot: HP-750C (field)</div> </div> Verification by: Atlantic Hydrographic Branch <i>Personnel</i> Soundings in: Meters <i>Feet</i> at MLLW	
Remarks: <i>Notes in bold red italics in the Descriptive Report were made during office processing.</i> <i>1) All Times are UTC.</i> <i>2) This is a Basic Hydrographic Survey.</i> <i>3) Projection is UTM Zone 20.</i>	

TABLE OF CONTENTS

A. AREA SURVEYED	1
B. DATA ACQUISITION AND PROCESSING	3
B.1. EQUIPMENT	3
B.2. QUALITY CONTROL	3
B.3. CORRECTIONS TO ECHO SOUNDING	3
C. VERTICAL AND HORIZONTAL CONTROL	4
D. RESULTS AND RECOMMENDATIONS	5
D.1. CHART COMPARISON	6
D.2. ADDITIONAL RESULTS	11
E. APPROVAL SHEET	13
APPENDIX I - V *	
SEPARATE I - V *	

** Data filed with original field records*

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SURVEY F00478

Scale of Survey: 1:5,000
Year of Survey: 2001
NOAA Ship WHITING
LCDR Gerd F. Glang, Commanding

A. AREA SURVEYED

This hydrographic survey was conducted in accordance with Hydrographic Survey Letter Instructions S-I901-WH, St. Thomas Harbor, U.S. Virgin Islands. The instructions were dated May 18, 2001. No changes were made to the letter instructions.

This Descriptive Report pertains to survey F00478, which includes St. Thomas Harbor in Charlotte Amalie, U.S. Virgin Islands.

For complete survey limits, see the chart on the following pages (**Figure 1** and **Figure 2**). **Figure 1** demarcates the primary survey area. **Figure 2** is a special investigation area southwest of the primary survey area. This area was examined at the request of Captain Jeffrey of the St. Thomas Pilots. This special investigation area is the site of a reported cruise ship grounding. Further information about this investigation is in the item investigations.

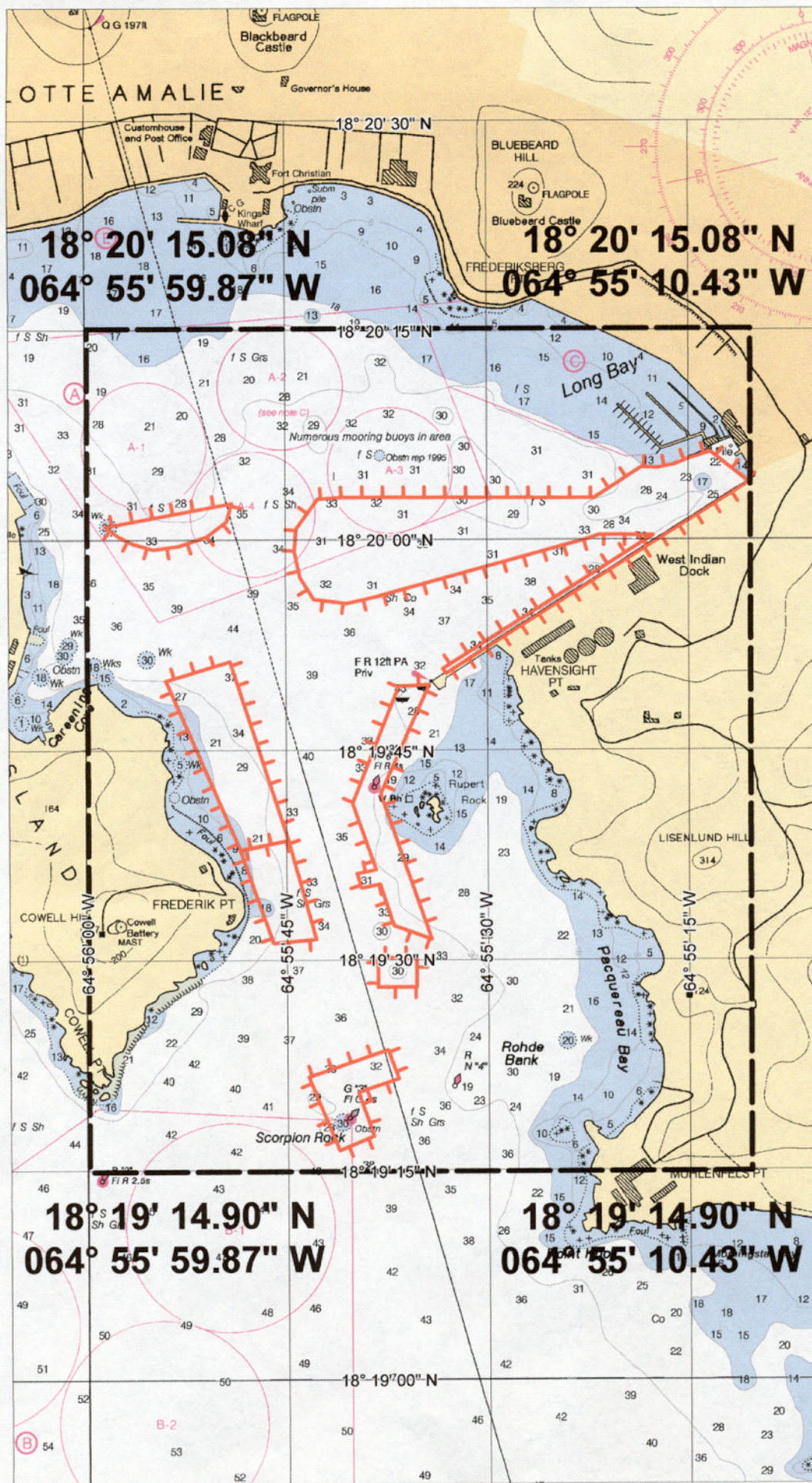


Figure 1

Geographic extents of Primary Survey Area S-1901-WH, F00478

This chartlet is up to date with the latest
Local Notice to Mariners information dated
01/26/2002. NOT FOR NAVIGATION.



NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

Project: S-1901-WH
Survey: F00478
State: U.S. Virgin Islands
Locality: St. Thomas
Sub-locality: St. Thomas Harbor
Survey Scale: 1:5,000

Sounding Units: Feet
Sounding Datum: MLLW
Horizontal Datum: NAD 83
Projection: UTM 20
Central Meridian: 063° 00 00
Scale Factor: 0.9996

NOAA Ship WHITING
LCDR Gerd F. Glang
Commanding
May 25 to
May 29, 2001

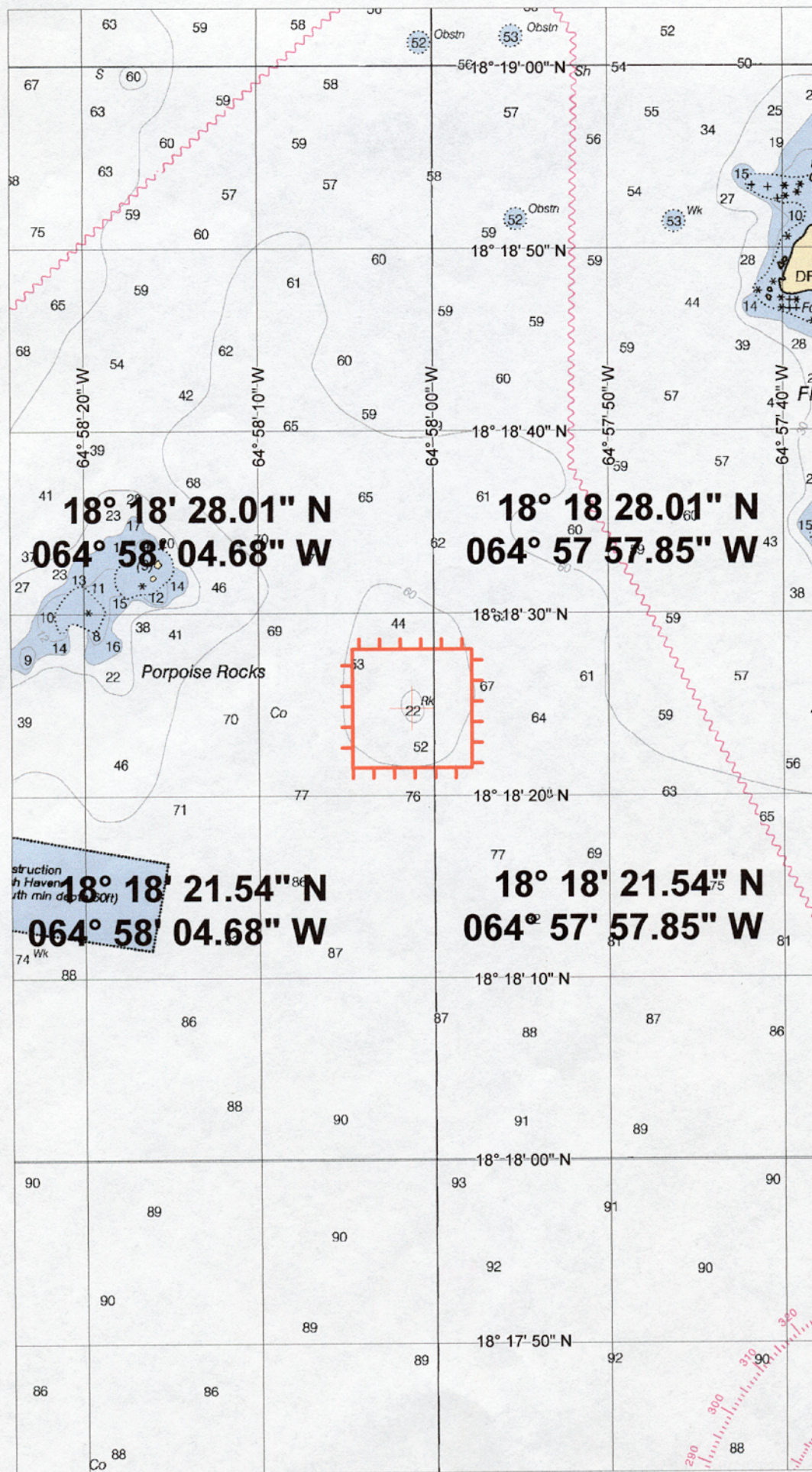


Figure 2 Geographic extents of S-1901-WH, F00478, Special Investigation Area

This chartlet is up to date with the latest Local Notice to Mariners information dated 01/26/2002. NOT FOR NAVIGATION.

NOAA Ship WHITING
LCDR Gerd F. Glang
Commanding
 May 25 to
 May 29, 2001

Sounding Units: Feet
 Sounding Datum: MLLW
 Horizontal Datum: NAD 83
 Projection: UTM 20
 Central Meridian: 063° 00 00
 Scale Factor: 0.9996

Project: S-1901-WH
 Survey: F00478
 State: U.S. Virgin Islands
 Locality: St. Thomas
 Sub-locality: St. Thomas Harbor
 Survey Scale: 1:5,000

**NATIONAL OCEANIC AND
 ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEAN SERVICE**



B. DATA ACQUISITION AND PROCESSING *See also the Evaluation Report.***B.1. EQUIPMENT**

Data were acquired by survey Launches 1005 and 1014. These launches are NOAA's standard 8.5-meter aluminum Jensen vessel with a typical 0.5-meter transducer draft. All vessels were configured as described in the Data Acquisition and Processing Report (DAPR)* for this project. A brief description of these configurations are listed below.

Launch 1005 acquired shallow water multibeam (SWMB), and VBES¹ data. An Odom Echotrac DF3200 MK II echosounder was used for VBES hydrography. SWMB data were acquired with a Reson SeaBat 8101 shallow water multibeam system. SSS data were acquired with an Edgetech model 272-T towed side scan sonar. Launch 1005 utilizes a TSS POS/MV 320 (version 2) GPS-aided inertial motion sensor to determine both positioning and attitude.

Launch 1014 acquired VBES and SSS data. Launch 1014 was also used to acquire detached positions (DP), and to support dive investigations. An Odom Echotrac DF3200 MK II echosounder was used for VBES hydrography. Side scan sonar data were acquired with an Edgetech model 272-T towed side scan sonar. Positioning was determined with a Trimble DSM212L integrated differential GPS receiver. Attitude data were determined using a TSS DMS-05 attitude sensor. Diver least depth determinations were acquired using a MOD III Diver Least Depth Gauge.

No unusual vessel configurations were employed on this project. Refer to the project DAPR* for exact vessel configuration information.

B.2. QUALITY CONTROL***Side Scan Sonar Quality Control***

Confidence checks were conducted on the Edgetech side scan system by observing the outer ranges of the sonar images. A good check consisted of distinguishing contacts across the entire range of the side scan trace.

Shallow Water Multibeam Quality Control

¹Launch 1005 VBES data were not processed when SWMB data were acquired.

There were no faults with the SWMB system which affected data integrity. Refer to this project's DAPR * for detailed discussion of SWMB system calibrations, data acquisition, and data processing.

** Data filed with original field records.*

Crosslines

Dedicated crosslines were not run for this survey. VBES data overlapped SWMB data in the special investigation area. Sounding agreement in this area was good, with isolated differences between neighboring VBES and SWMB soundings not greater than two feet. The special investigation area is defined by a large rock pinnacle and dramatic slopes. SWMB development of the special investigation area involved SWMB lines run at orthogonal angles. Sounding agreement between lines was excellent.

Junctions

Survey F00478 does not junction with any contemporary surveys. ***Concur***

Prior Survey Comparison See also the Evaluation Report.

F00478 shares common areas with prior survey H10505, conducted in 1993. Sounding agreement between F00478 and H10505 was good, usually with soundings within one to two feet of each other. Discrepancies between the two surveys are consistent with charting recommendations and DtoNs. ***Concur***

B.3. CORRECTIONS TO ECHO SOUNDING

All sounding data were corrected as described in the project DAPR. A table listing all the sound velocity casts is located in **Separate III. *Data filed with original field records.***

C. VERTICAL AND HORIZONTAL CONTROL *See also the Evaluation Report.*

Vertical Control

The tidal datum for this project is Mean Lower Low Water (MLLW). The operating tide station at St. Thomas Harbor, Charlotte Amalie, USVI (975-1639) served as control for datum determination.

Tidal zoning for this survey is consistent with the letter instructions. The zones used for this survey are as follows:

STATION	CORRECTOR (min)	RATIO	REFERENCE
---------	-----------------	-------	-----------

F00478

NOAA Ship WHITING

August 14, 2001

PRS10	0	x1.00	975-1639
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A Request for Smooth Tides was sent to N/OPS1 on June 30, 2001 (**Appendix IV**). * Verified tides are applied to all sounding data. *Approved tides and zones were not applied to survey during office processing. Approved tides were compared with tides applied by the field unit. No discrepancies were found. *Data filed with original field records.*

Horizontal Control

The horizontal datum used for this survey is the North American Datum of 1983 (NAD 83), projected using a UTM zone of 20.

Sounding positional control was obtained using Global Positioning System (GPS) corrected by the U.S. Coast Guard differential GPS reference station. The primary differential beacon used for this survey was Isabella , PR. No horizontal control stations were established for this survey.

Daily monitoring of the horizontal dilution of precision (HDOP) was conducted by all vessels in the HYPACK Data Display window. This value never exceeded 4.00, and adequate satellite coverage was maintained throughout the survey. All positioning equipment was operated in a manner consistent with the manufacturers requirements and as described in the DAPR *. There were no equipment malfunctions that affected the positional quality of the data.

** Data filed with original field records.*

D. RESULTS AND RECOMMENDATIONS

D.1. CHART COMPARISON *See also the Evaluation Report.*

There is one chart affected by this survey:

25649, 18th edition, November 2, 1996, 1:10,000

General Agreement with Charted soundings

West Indian Dock Pier

Soundings acquired in the vicinity of the West Indian Dock are in general agreement with charted depths. Soundings shoaler than charted were found near the north end of the pier. These discrepancies are itemized in the Dangers to Navigation Report (**Appendix I**). * *Data filed with original field records.*

Of particular note is the following charting recommendation for Chart 25649:

Surveyed Depth (ft)	Charted Depth (ft)	Latitude	Longitude
30	34	18° 19' 54.72" N	064° 55' 26.75" W <i>Concur.</i>

Anchorage Area

Soundings taken in and near anchorage areas A-2, A-3, and A-4 are in general agreement with charted depths. Notable exceptions are two shoal soundings that bracket a charted 35 ft depth north of anchorage A-3. Both soundings are in close proximity to the 30 ft curve.

These two soundings are recommended for charting on Chart 25649:

Surveyed Depth (ft)	Charted Depth (ft)	Latitude	Longitude
21	30 ft curve	18° 20' 11.6897" N	064° 55' 38.9055" W <i>Concur.</i>
20	30 ft curve	18° 20' 11.2797" N	064° 55' 35.4619" W <i>Concur.</i>

Harbor South Entrance

Soundings taken along the eastern shore of Hassel Island were generally shoaler than charted depths. Soundings in the harbor south entrance are in general agreement with charted depths. Of particular note are the following charting recommendations for Chart 25649:

Surveyed Depth (ft)	Charted Depth (ft)	Latitude	Longitude
25	27	18° 19' 48.89" N	064° 55' 52.73" W *
35	37	18° 19' 50.18" N	064° 55' 49.39" W *
30	33	18° 19' 30.03" N	064° 55' 33.14" W *
18	21	18° 19' 38.23" N	064° 55' 46.91" W

** Concur*

Special Investigation Area

The charted 22 foot rock was investigated at the request of Captain Jeffrey of the St. Thomas Pilots. This special investigation area is the site of a reported cruise ship grounding. Multibeam and dive operations were conducted on this item. Visual indications of a grounding were evident at the site. These included fractured rock, metal shards, and paint streaks. The hydrographer recommends removing the charted 22 ft rock and adding a 24-ft rock at 18° 18' 24.70" N, 064° 58' 01.20" W. See item investigation for Grounding Site.

Concur. See also page 11 of this report.

DANGERS TO NAVIGATION

Eight dangers to navigation (see **Appendix A**)* were discovered during mainscheme hydrography on survey F00478, St. Thomas Harbor. **Appended to this report.*

Particular attention should be paid to the DtoNs along the eastern portion of West Indian Dock (DtoN 1,2 and 3). The area is frequented by large, deep-draft cruise ships with typical drafts of 32-36 ft.

DTON #	Depth(m)	Depth(ft)	Latitude	Longitude	Item
#1	5.36	17	18° 20' 04 " 05"	064° 55' 14"	Sounding
#2	7.35	24	18° 20' 03"	064° 55' 17 " 19.3"	Sounding

#3	8.66	28	18° 20' 01. 75 "	064° 55' 21 21.75 "	Sounding
#4	8.61	28	18° 19' 57. 75 "	064° 55' 22 21.90 "	Sounding
#5	8.67	28	18° 20' 05. 40 "	064° 55' 41. 45 "	Sounding
#6	9.16	30	18° 19' 45. 81 "	064° 55' 37. 76 "	Sounding
#7	9.32	30	18° 19' 32. 10 "	064° 55' 38. 10 "	Sounding
#8	8.61	28	18° 19' 18. 88 "	064° 55' 42. 75 "	Sounding

These eight DtoNs have been applied to the working edition of chart 25649. It is recommended that these DtoNs be revised and charted in the positions shown on the present survey.

AWOIS Items and Significant Contacts

There were two AWOIS items addressed by this survey. There was one additional contact investigated. Each of these features are discussed in this section.

F00478

NOAA Ship WHITING

August 14, 2001

AWOIS: 11050

Item Description: Charted Obstruction Reported 1995

Source: LNM 33/95

Item Position: Lat. 18° 20' 06.00" N, Long. 064° 55' 38.00" W

Required Investigation: Full

Item Status: Assigned

Charts Affected: 25649

INVESTIGATION

Contact No: 005_1327_0002 (Dive Investigation), 005_1327_0001, 007_1346_0001, 009_1356_0001, 102_1216_0001, 201_1245_0001, 202_1248_0001, 202_1248_0002, 203_1253_0001

DN: 145, 149

Least Depth Position Number: N/A

Investigation Used: 200% SSS, Dive

Surveyed Position: N/A

Position Determined By: Differential GPS

Investigation Summary: This item was covered with 200% SSS. Eight contacts were identified within the AWOIS search radius during mainscheme SSS operations. These contacts were deemed insignificant by the hydrographer and were not investigated further. A separate contact was identified 40 m east of the AWOIS search radius. The height of the obstruction could not be determined from side scan operations. This contact was further investigated through dive operations. Divers discovered a wicker/fiberglass chair at the dive site. The obstruction was removed by the NOAA dive team.

CHARTING RECOMMENDATION

Recommendations: The hydrographer recommends deleting the charted obstruction.

Concur. Delete the dangerous Obstrn rep 1995.

F00478

NOAA Ship WHITING

August 14, 2001

Item: Grounding Site

Item Description: 22 ft Charted Rock

Source: LNM 33/95

Item Position: Lat. 18° 18' 24.697" N, Long. 064° 58' 01.196" W

Required Investigation: N/A

Item Status: N/A

Charts Affected: 25649

INVESTIGATION

Contact No: N/A

DN: 149

Least Depth Position Number: 072_1438 Ping:246 Beam: 26

Investigation Used: 100% Multibeam, Dive

Surveyed Position: Lat. 18° 18' 24.697" N, Long. 064° 58' 01.196" W

Position Determined By: Differential GPS

Investigation Summary: This area was examined at the request of Captain Jeffrey of the St. Thomas Pilots. This special investigation area is the site of a reported cruise ship grounding. The area was covered with 100% SWMB. Surveyed least depth was 7.28 m (24 ft). The area was further covered by diver investigation. The diver least depth confirmed the surveyed least depth of 24 ft. See accompanying Dive Investigation Report.*

** Filed with original field records*

CHARTING RECOMMENDATION

Recommendations: The hydrographer recommends removing the charted 22 ft rock and adding a 24 ft rock at the surveyed position.. *Concur.*

D.2. ADDITIONAL RESULTS

Aids to Navigation (ATON's) and Other Detached Positions

The following is a list of ATON's located in the *Light List* and on chart **25649**. All ATON's were found to be on station and serving their intended purpose.

ATON	Light List #
Rupert Rock Day Beacon	32595
West Indian Dock Light	32605
Lighted Buoy "3"	32585
Buoy "4"	32590
Entrance Lighted Buoy "2"	32570

Detached positions were taken south of the West Indian Dock Pier at the charted location of two mooring buoys. Both of the charted mooring buoys were found to be off station. The hydrographer recommends removing charted mooring buoys at approximate location 18° 19' 49.39" N, 064° 55' 34.79" W* and 18° 19' 48.58 **37"** N, 064° 55' 36.13 **40"** W. It is further recommended that mooring buoys be charted at location 18° 19' 47.93" N, 064° 55' 36.18" W and 18° 19' 47.11" N, 064° 55' 36.57" W. **Concur w/clarification. Defer to USCG for charting recommendations.** * **Not charted on working chart edition.**

Detached Positions were taken on a dolphin used by vessels at the West Indian Dock Pier. The hydrographer recommends charting a dolphin at location 18° 19' 49.04**02"** N, 064° 55' 35.27**47"** W. The following is a list of chart recommendations based on detached positions:

Concur.

Item	Charted Latitude	Charted Longitude	DP Latitude	DP Longitude
Mooring Buoy	18° 19' 49.39" N	064° 55' 34.79" W	18° 19' 47.93" N Pos # 20269	064° 55' 36.18" W
Mooring Buoy	18° 19' 48.58 48.37" N	064° 55' 36.13 36.40" W	18° 19' 47.11" N Pos # 20270	064° 55' 36.57" W
Dolphin	-	-	18° 19' 49.04 02" W Pos # 20265	064° 55' 35.27 47" W

There were no requirements for shoreline verification on this survey.

E. APPROVAL SHEET

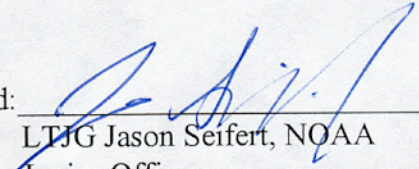
**S-I901-WH
St. Thomas, U.S. Virgin Islands**

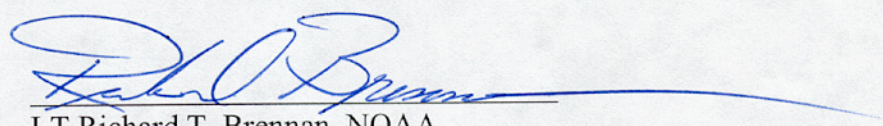
**St. Thomas Harbor
Survey Registry No. F00478**

Field operations for this basic hydrographic survey were conducted under my daily supervision with frequent checks of progress and adequacy. All field sheets, this Descriptive Report, and all accompanying records and data are approved.

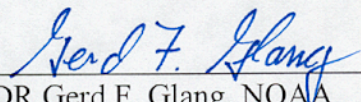
This survey is adequate to supersede all prior surveys in common areas, and for application to the relevant NOS nautical charts.

Submitted: _____


LTJG Jason Seifert, NOAA
Junior Officer


LT Richard T. Brennan, NOAA
Field Operations Officer

Approved and Forwarded: _____


LCDR Gerd F. Glang, NOAA
Commanding Officer



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
Office of Marine and Aviation Operations
NOAA Ship WHITING S-329
439 W. York Street
Norfolk, VA 23510-1114

REPORT OF DANGERS TO NAVIGATION

Survey Registry Number: F00478

State: US Virgin Islands
Locality: St. Thomas
Sub-Locality: St. Thomas Harbor

Project Number: S-I901-WH

Survey Dates: May 25 - 29, 2001

Soundings are reduced to Mean Lower Low Water (MLLW) using Verified Tides. The horizontal datum is NAD 83.

Chart(s) Affected:

25649 18th Edition, November 2, 1996

DANGERS TO NAVIGATION

Eight dangers to navigation (see Attachments) were discovered during mainscheme hydrography on Sheet H11078, St. Thomas Harbor.

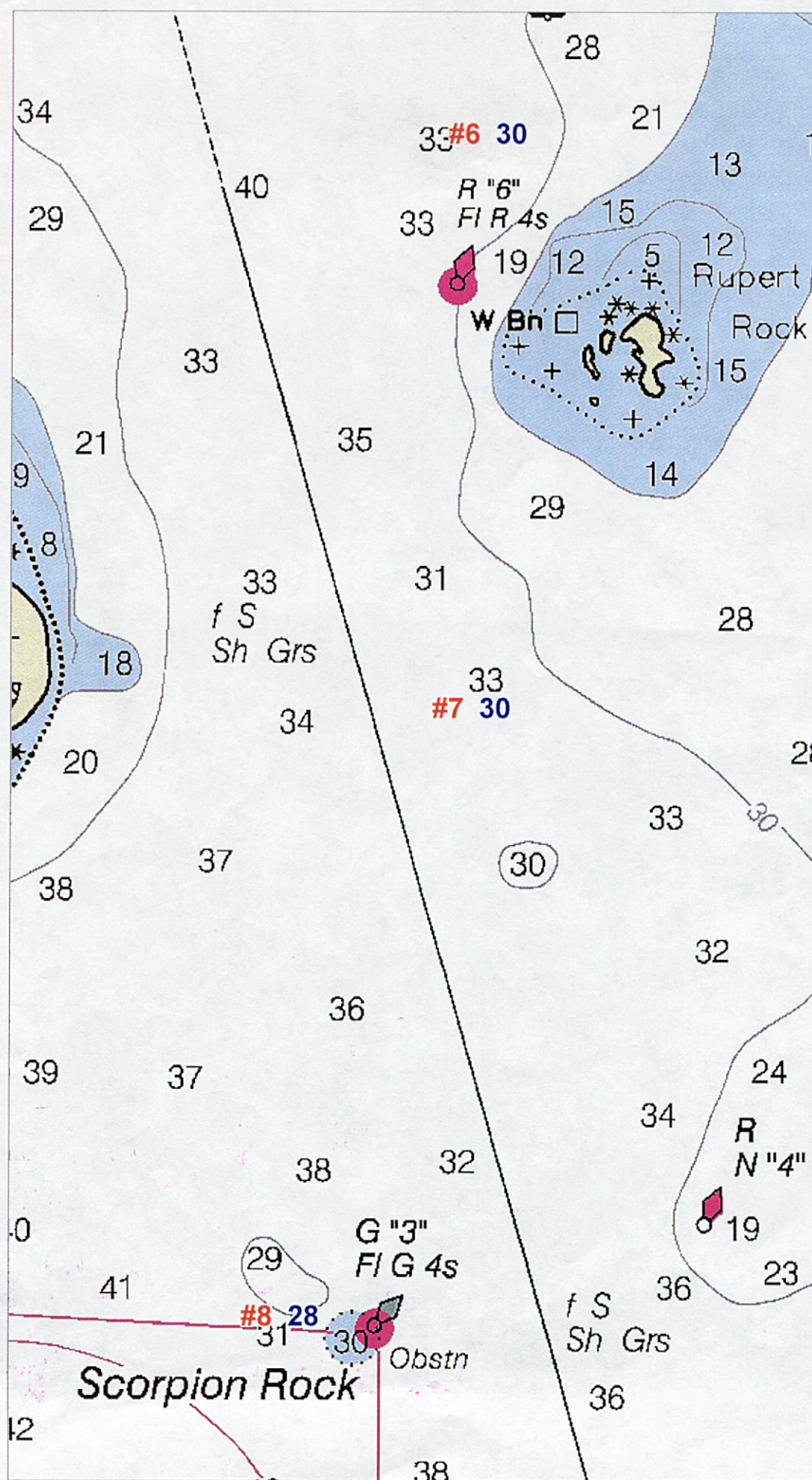
Particular attention should be paid to the DtoNs along the eastern portion of West Indian Dock (DtoN 1,2 and 3). The area is frequented by large, deep-draft cruise ships.



Attachment 1

DTON #	Depth(m)	Depth(ft)	Latitude	Longitude	Item
#1	5.36	17	18°20'04"	064°55'14"	Sounding
#2	7.35	24	18°20'03"	064°55'17"	Sounding
#3	8.66	28	18°20'01"	064°55'21"	Sounding
#4	8.61	28	18°19'57"	064°55'22"	Sounding
#5	8.67	28	18°20'05"	064°55'41"	Sounding
#6	9.16	30	18°19'45"	064°55'37"	Sounding
#7	9.32	30	18°19'32"	064°55'38"	Sounding
#8	8.61	28	18°19'18"	064°55'42"	Sounding

Questions concerning this report should be directed to the Chief, Atlantic Hydrographic Branch at (757)441-6746.



This chartlet is up to date with the latest
Local Notice to Mariners information dated
June 23, 2001.

NOT FOR NAVIGATION.

Chartlet 2 of 2 Chart 25649, 18th Edition, Nov 2, 1996, 1:10,000, St. Thomas Harbor

NOAA Ship WHITING
CDR Steven R. Barnum
Commanding
May 25 to
May 29, 2001

Sounding Units: Feet
Sounding Datum: MLLW
Horizontal Datum: NAD 83
Projection: UTM 20
Central Meridian: 063° 00 00
Scale Factor: 0.9996

Project: S-1901-WH
Survey: F00478
State: US Virgin Islands
Locality: St. Thomas
Sub-locality: St. Thomas Harbor
Survey Scale: 1:5,000

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE





UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: August 22, 2001

HYDROGRAPHIC BRANCH: Atlantic
HYDROGRAPHIC PROJECT: S-I901-WH-2001
HYDROGRAPHIC SHEET: F00478

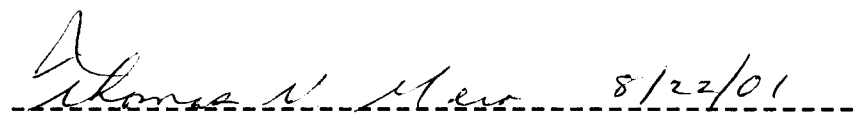
LOCALITY: St. Thomas Harbor, USVI
TIME PERIOD: May 25 - 29, 2001

TIDE STATION USED: 975-1639 Charlotte Amalie, St. Thomas, USVI
Lat. 18° 20.1'N Lon. 64° 55.2'W
PLANE OF REFERENCE (MEAN LOWER LOW WATER): 0.000 meters
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 0.234 meters

REMARKS: RECOMMENDED ZONING
Use zone(s) identified as: PRS10

Refer to attachments for zoning information.

Note 1: Provided time series data are tabulated in metric units (meters), relative to MLLW and on Greenwich Mean Time.



CHIEF, REQUIREMENTS AND DEVELOPMENT DIVISION



N/CS 33-29-02

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU
BY (Check)

☐ ORDINARY MAIL ☐ AIR MAIL
☐ REGISTERED MAIL ☒ EXPRESS
☐ GBL (Give number) _____

DATE FORWARDED 10/01/2002

NUMBER OF PACKAGES 2

TO:

☐ NOAA/National Ocean Service
Chief, Data Control Group, N/CS 3x1
SSMC3, Station 6826
1315 East-West Highway
☐ Silver Spring, MD 20910-3832

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

F00478 US Virgin Islands, St Thomas, St Thomas Harbor

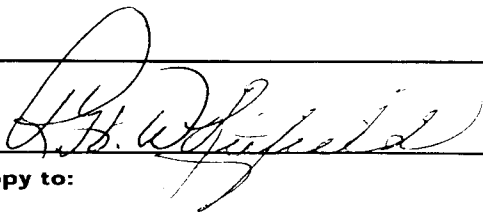
1 Tube Containing:

1 Mylar H-Drawing of F00478 for chart 25649

1 Box Containing:

1 Original Descriptive Report with 3 page size smooth sheets for F00478

FROM: (Signature)



RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

☐ Richard H. Whitfield
NOAA, NOS, Atlantic Hydrographic Branch, N/CS33
439 West York St.
Norfolk, VA 23510
☐

**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR F00478 (2001)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

B. AUTOMATED DATA ACQUISITION AND PROCESSING

The following software was used to process data at the Atlantic Hydrographic Branch:

MicroStation J, version 7.1
I/RAS B, version 5.01
NADCON, version 2.10
MapInfo, version 6.5
CARIS HIPS/SIPS 2000
PYDRO, version 1.11

The smooth sheet was plotted using a Hewlett Packard DesignJet 2500CP plotter.

COMPARISON WITH PRIOR SURVEYS

A comparison with prior surveys was not done during office processing in accordance with section 4. of the memorandum titled *Changes to Hydrographic Survey Processing*, dated May 24, 1995.

C. VERTICAL AND HORIZONTAL CONTROL

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values. Three 1:5,000 scale plots have been annotated with ticks showing the computed mean shift between NAD 83 and the North American Datum of 1927 (NAD 27).

(1) To place plot 1 of 3 on NAD 27, move the projection lines 7.160 seconds (220.142 meters or 44.03 mm at the scale of the survey) south in latitude, and 1.479 seconds (43.435 meters or 8.69 mm at the scale of the survey) east in longitude.

(2) To place plot 2 of 3 on NAD 27, move the projection lines 7.160 seconds (220.145 meters or 44.03 mm at the scale of the survey) south in latitude, and 1.479 seconds (43.428 meters or 8.69 mm at the scale of the survey) east in longitude.

(3) To place plot 3 of 3 on NAD 27, move the projection lines 7.161 seconds (220.167 meters or 44.03 mm at the scale of the survey) south in latitude, and 1.473 seconds (43.261 meters or 8.65 mm at the scale of the survey) east in longitude.

D.1 COMPARISON WITH CHART 25649 (18th Edition, Nov 02/96)

The charted hydrography originates with the prior surveys and requires no further consideration. The hydrographer makes adequate chart comparisons in sections D. of the Descriptive Report. Attention is directed to the following:

A charted dangerous obstruction with a depth of 30 feet, in Latitude 18°19'18.53"N, Longitude 64°55'40.83"W, originating with prior survey H10505 (1993) was not addressed by the hydrographer. An obstruction with a depth of 29 feet was located in Latitude 18°19'18.43"N, Longitude 64°55'40.24"W. It is recommended that the dangerous 30-ft obstruction be revised to a dangerous 29-ft obstruction as shown on the present survey.

In the vicinity of Latitude 18°20'29"N, Longitude 64°55'55"W, the working chart public building name, Customhouse, is misspelled. It is recommended that the correct spelling be applied to the chart.

The present survey is adequate to supersede the charted hydrography within the common area.

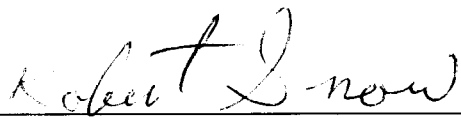
ADEQUACY OF SURVEY

This is an adequate hydrographic/side scan sonar/multibeam survey. No additional work is recommended.

MISCELLANEOUS

Chart compilation was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compilation data will be forwarded to Marine Chart Division, Silver Spring, Maryland. The following NOS charts were used for compilation of the present survey:

25649 (19th Working Edition)
(Received Aug 26, 2002)

A handwritten signature in cursive script that reads "Robert Snow". The signature is written in dark ink and is positioned above a horizontal line.

Robert Snow

Cartographic Technician
Verification of Field Data
Evaluation and Analysis

APPROVAL SHEET
F00478

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Robert G. Roberson Date: 26 SEPTEMBER 2002
Robert G. Roberson
Cartographer
Atlantic Hydrographic Branch

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Emily B. Christman Date: 9/26/02
Emily B. Christman
Commander, NOAA
Chief, Atlantic Hydrographic Branch

Final Approval:

Approved: Samuel P. DeBow Date: 9/30/02
Samuel P. DeBow
Captain, NOAA
Chief, Hydrographic Surveys Division

manuscript 10/3/02
SV


64° 56'00"

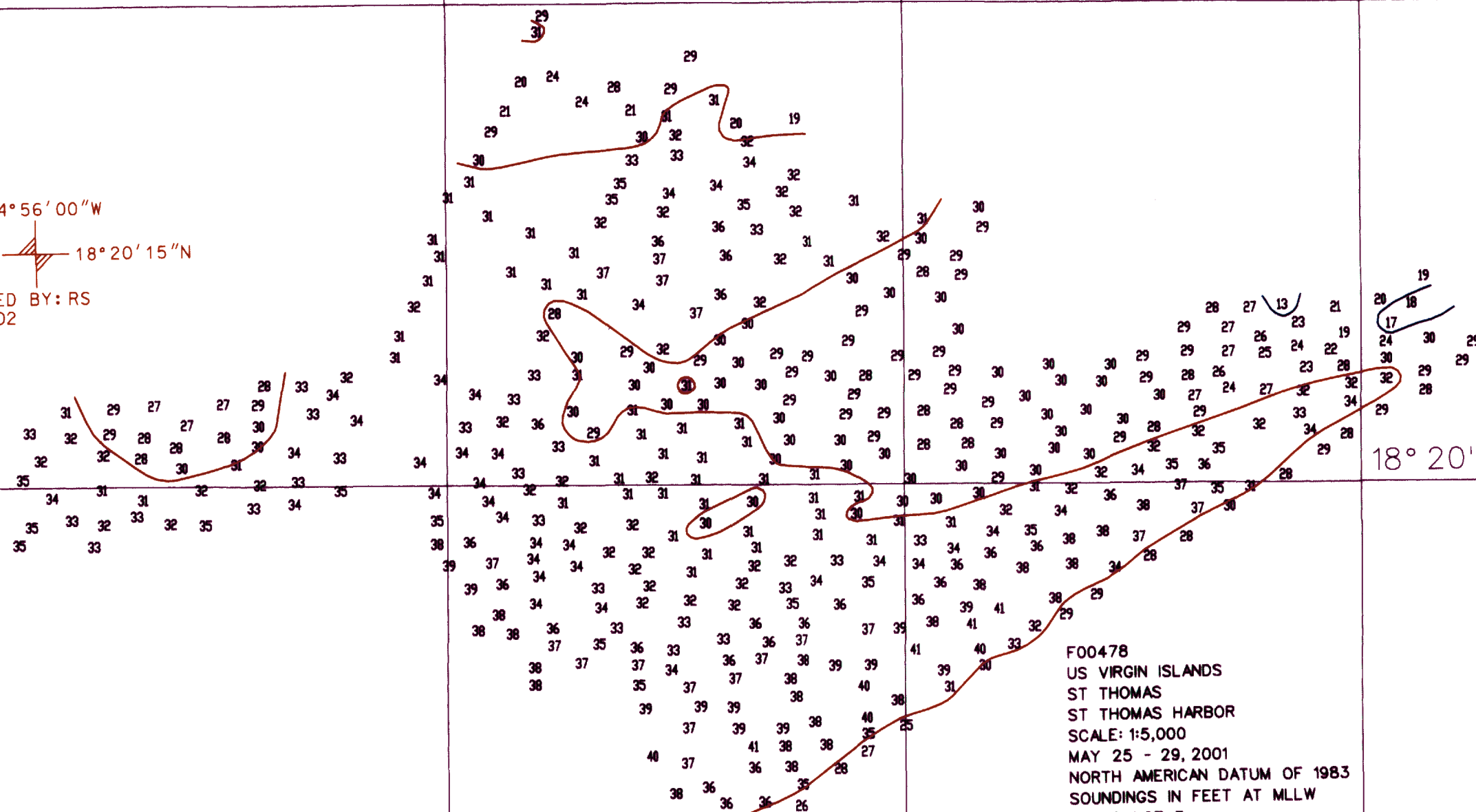
64° 55'45"

64° 55'30"

64° 55'15"

18° 20'15"

64° 56' 00" W
NAD 27  18° 20' 15" N
CHECKED BY: RS
3/21/02



JOINS SHEET 2 OF 3

F00478
US VIRGIN ISLANDS
ST THOMAS
ST THOMAS HARBOR
SCALE: 1:5,000
MAY 25 - 29, 2001
NORTH AMERICAN DATUM OF 1983
SOUNDINGS IN FEET AT MLLW
SHEET 1 OF 3
AWOIS ITEM • 11050

64° 56'00"

64° 55'45"

64° 55'30"

64° 55'15"

18° 19'45"

64° 56' 00"

64° 55' 45"

64° 55' 30"


64° 55' 15"

18° 19' 45"

18° 19' 30"

18° 19' 15"

JOINS SHEET 1 OF 3

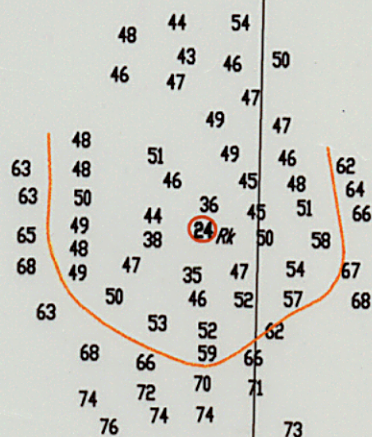
64° 56' 00" W
NAD 27  18° 19' 45" N
CHECKED BY: RS
3/21/02

F00478
US VIRGIN ISLANDS
ST THOMAS
ST THOMAS HARBOR
SCALE: 1:5,000
MAY 25 - 29, 2001
NORTH AMERICAN DATUM OF 1983
SOUNDINGS IN FEET AT MLLW
SHEET 2 OF 3

64° 58'15"

64° 58'00"

18° 18'30"



64° 58' 15" W

NAD 27 18° 18' 30" N

CHECKED BY: RS
3/21/02

18° 18'15"

F00478
US VIRGIN ISLANDS
ST THOMAS
ST THOMAS HARBOR
SCALE: 1:5,000
MAY 25 - 29, 2001
NORTH AMERICAN DATUM OF 1983
SOUNDINGS IN FEET AT MLLW
SHEET 3 OF 3

64° 58'15"

64° 58'00"

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. F00479

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]